

37. CULTIVATION OF ENDANGERED PLANTS IN SOUTH INDIA — 2. *BENTINCKIA CONDAPANNA* BERRY EX ROXB.

(With a plate)

This note relates to a palm namely *B. condapanna* Berry ex Roxb. which is highly restricted and endemic to a few hills of Tamilnadu and Kerala in Western ghats.

B. condapanna Berry ex Roxb. commonly known as hill areca nut (Tam: Varekamugu, Tel: Cadapanna, Mal: Kanthal) (Gamble 1957, Sundararaj and Balasubramanyam 1959) belongs to the family Arecaceae (Palmae). The genus *Bentinckia* is named after Sir William Henry Cavendish Bentinck, ex Governor General of the East-Indies by Berry in Roxb. Fl. Ind. III, 621 (Hooker 1894). This genus is represented by 2 species in India namely *B. condapanna* Berry ex Roxb. and *B. nicobarica* (Kurz) Becc. (Hooker 1894). *B. condapanna* Berry ex Roxb. is a tall, slender, unbranched tree of about 30 feet appearing gregariously in certain cliffs of Western ghats in Tirunelveli, Kanyakumari and Madurai districts of Tamilnadu and Trivandrum district of Kerala (plate 1). These palms seem to like the western slopes particularly with some protection from sweep of direct wind. These have been located in Kakachi and Nalumukku cliffs on the way to Kodayar, in Perumal malai, Naterikal in Kalakkadu hills, Manjanamparai and western slopes of Agasthyamalai in an altitude range of 90-1350 Mts. F. Blasco (1971) states "Dans ces forets des vallees la flore S'enrichit, par rapport au type precedent en.....palmiers (*Bentinckia* — *condapanna* versant N. E. des Palni,.....) etc." The detailed herbarium data in M. H. Coimbatore is furnished in table 1.

There has not been much information from the published records on cultivation of this

species as an ornamental in any of the known Botanical gardens of India and abroad except at Peradeniya Gardens, Sri Lanka (Blatter, 1926). The terminal buds of these trees are reported to be edible (Gamble 1957).

Due to its highly restricted distribution and non-occurrence of this palm in any other part of the country or abroad this has been declared highly endangered (Jain and Sashtri 1980).

The experimental garden of the Botanical Survey of India, Southern Circle, Yercaud brought saplings of this species from natural habitat from time to time since 1974 and introduced in rock crevices particularly facing west almost simulating natural habitat, but they failed to establish. In the year 1977 again 6 plants were obtained from collections of Dr. A. N. Henry and further trials were made at Yercaud. They were introduced in different places after acclimatizing in pots in nursery for nearly one year. The first planting made in September, 1978 in a shady rocky area on the slope facing west did not establish inspite of all care. In October, 1978 two other plants in stock with almost similar size were put into deep pits of 4' x 4' in rich humus soil with plenty of shade above. Regular watering, digging, weeding etc were attended. Though one plant showed inhibition in growth, another grew better with healthy leaves and good spread (plate). 2 other in pots have also been healthy though stunted in growth. These have since been planted in suitable locality during the current rainy season. The measurements of the first two plants in beds in given in table-2 to indicate the growth behaviour in this clima-

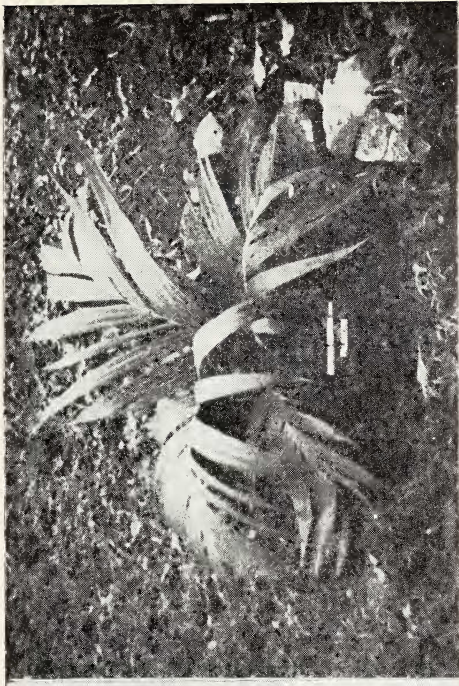
TABLE 1

Field No.	Date	Place of collection.	Collected by	Remarks.
52652	4.3.1917.	Near Neterikal, Tirunelveli Dt., T.N.	
16383	30.5.1963.	Manjanamparai, Tirunelveli Dt., T.N.	A. N. Henry.	Pinkish red flowers.
1039	28.8.1967.	Perumalmalai, Madurai Dt., T.N.	Thanikaimani.	Fruits red, smooth and speroidol when fresh, Immature fruits contains a central cavity filled with a waxy sap.
44639	6.10.1973.	Western slope of Agastyamalai, Trivandrum Dt., Kerala.	J. Joseph.	Spadix arising from the axils of fallen leaves below the crown; flowers pinkish red; fruits ovate globose, bright chocolate coloured.
49651	7.8.1977.	Way to valve house, upper Kodayar, Kanyakumari Dt. T.N.	A. N. Henry.	Tall tree, \pm 20 mt. high on rocky slopes, fruits red, pinkish red, very common.
73126	Kalakkadu hills, Tirunelveli Dt., T.N.	

TABLE 2

MEASUREMENTS RECORDED AS ON 15-7-1980

Plant No.	Height of the Shoot.	Girth of the plant at ground level.	No. of leaves	Length & Breadth of the largest leaf. (L x B)
1.	26 Cms.	22 Cms.	8	1.3 x 0.75 M
2.	10 Cms.	10 Cms.	6	0.65 x 0.26 M



Above: The plant in Experimental Garden, Yercaud.
Left: *Bentleckia condapanna* Berry ex Roxb. in natural habitat.